(for office use only)

BPET-25

NEW JERSEY
BEST PRACTICES
2002-2003 APPLICATION

Northern Valley Reg. H.S. at Old Tappan

Failure to comply with the procedures for submission of the application will result in the elimination of the application.

Application Requirements:

1. **RESPONSES to the information and the statements below must be ANONYMOUS and ACCURATE.** No reference should be made to the names of the district, the school(s) or community. Use the words "the school" or "the schools" in responding to the statements
2. **USE ONLY THE SPACE PROVIDED ON THE APPLICATION FORM on pages 1, 2 (if applicable), and 4.** Do not include any additional materials, as they will not be reviewed in the selection process.
3. Applications must be typed on **8 ½" x 11"** white paper, portrait format. Twelve-point or larger computer font or fourteen-pitch or larger typewritten font must be used. This sentence is in twelve-point Times New Roman.
4. Keyboarded responses to all the statements below must be no more than a total of four pages. Keyboard and number the statement followed by the response. Format your response for clarity.
5. **The information on page 4 and the responses** to statements must be copied on one side of the page. The information on pages 1 and **2** (if applicable) must be copied on one side of the page. Staple pages 1, 2 (if applicable), 4, and the keyboarded responses together, in that same order.
6. The original application must be signed by the district chief school administrator or charter school lead person, indicating his/her approval.
7. **The original and seven copies of the application** must be submitted to the county superintendent of schools by **December 15, 2002**, with the **Itemized List of District Applications** form. Keep the seven copies of each application together with the original containing the signature of the district chief school administrator or charter school lead person on the top of each set.

The following data is required to assist the panelists in the evaluation of the application:

Type of School

___ Elementary School
___ Middle School
___ Junior High School
_X_ High School
___ Other: _____

Grade Levels

_____
_____
_____
10-12
_____

Practice Name Hypermedia: Creating a Still Image Desktop Video

Number of Schools with Practice 1
Number of Districts with Practice 1
Location __ Urban/City __ Suburban With Urban Characteristics
_X_ Suburban __ Small City/Town __ Rural

Check the ONE CATEGORY into which the practice best fits.

___ Arts (Visual and Performing Arts)
___ Assessment/Evaluation
___ Citizenship/Character Education
___ Diversity and Equity Programs
___ Early Childhood Education Programs
___ Educational Support Programs
_X_ Educational Technology
___ Gifted and Talented Programs
___ Guidance and Counseling Programs
___ Health and Physical Education
___ Language Arts Literacy
___ Mathematics
___ Professional Development
___ Public Engagement (family involvement and partnerships with business, community, school districts, and/or higher education)
___ Safe Learning Environment
___ School-to-Careers/Workplace Readiness
___ Science
___ Social Studies
___ Special Education
___ World Languages/Bilingual Education

1. Describe the practice proposed for recognition, and list its objectives. Detail how the practice is innovative and how it promotes high student achievement.

2. List the specific *Core Curriculum Content Standards, including the Cross-Content Workplace Readiness Standards,** addressed by the practice and describe how the practice addresses those standard(s). Provide an example to substantiate your response.

3. Describe the educational needs of students that the practice addresses. Document the assessment measures used to determine the extent to which the objectives of the practice have been met. Provide assessments and data to show how the practice met these needs.

4. Describe how you would replicate the practice in another school and/or district.

*The 2002 edition of the ***Core Curriculum Content Standards*** published by the New Jersey State Department of Education was disseminated to all districts and charter schools and is available on line through the department's web site at http://www.state.nj.us/education.

1. Describe the practice proposed for recognition, and list its objectives. Detail how the practice is innovative and how it promotes high student achievement.

Practice proposed for recognition: " Hypermedia: Creating a Still Image Desktop Video"

When most individuals think of the term multimedia, the immediate thought that comes to mind is a PowerPoint presentation. Although PowerPoint can be used as a multimedia authoring tool, there are many other applications that can be used effectively and without having to spend a small fortune in software. Our school has taken a novel approach in order to allow our students to become acquainted and proficient with emerging multimedia technologies. Three years ago, we created an elective titled "Hypermedia: An Interactive Approach to Multimedia Computer Applications". The course has gained such popularity that it has expanded to an advanced second level. The course introduces students to the core of what constitutes a true multimedia project. Students explore and manipulate the following areas: text, sound, still images, and moving images in the form of animations and videos.

When students are taught how to create a multimedia project in a traditional setting, they are usually not fully responsible for the final project. We have taken the approach that the student has to possess "ownership" for his/her creation. In order to reach this level, the hypermedia student becomes the problem solver, producer, director, and a multitude of other decision-making duties. The instructor takes on the role of facilitator. This unique class structure starts on day one and lasts all year long. The student assumes full responsibility from the inception all the way to the destination. In most traditional settings, the instructor has defined parameters that the student must conform to and the room for creativity is curtailed.

We have created a project within the scope of Hypermedia that challenges the students to create a "still image" movie using desktop videography techniques. The students have to create this movie in QuickTime format using a program called Avid Cinema. The immediate constraint that the students face is that they cannot use any moving images or video clips. They have to rely on "telling a story" through still pictures that support the background music and words. The project challenges the students in many ways that fosters critical thinking, open ended problem solving, resourcefulness, and advanced use of technological skills.

Students are taught to compose this multimedia project by thinking about the project in terms of a linear approach. Each aspect of the multimedia project is looked at in terms of a unique layer. The student will have a layer for text, sound, and the still images. As the project is "sewn" together, special video filters can be employed to accentuate the imagery. These filters work similar to PowerPoint transitions. When the video is rendered and all the layers fused together, it is then exported in QuickTime format. In many respects, we teach multimedia via a three dimensional process. If you visualize a multimedia project from side to side (width) and the layers as up and down (height), the filters then become the third dimension (depth).

Students are asked to identify and select a song that contains lyrics and is suitable for all audiences. This is an additional constraint because they might have to select music that they are not accustomed to listening on a daily basis. They manipulate the sound track and edit the track so that it is optimized and occupies less space on the project. They edit the track using a sound editing program like Sound edit 16. The song is then saved as a 22KHz, 16 bit stereo track. Once this is accomplished, they then search the Internet for the lyrics to the song. They transfer the lyrics to Microsoft Word by copying and pasting. We also tackle the concept of acceptable usage and plagiarism. All sources and sites will be cited at the end of the video. They then have to search for appropriate images that convey the information and tell the story. These images are then saved in the appropriate format for the application. They are shown how to use Adobe PhotoShop as a way of making all the images a certain size, same resolution, and a certain format. Students will import these still images into Avid Cinema.

Each student will face his or her own individual problems and obstacles. Is the song too fast or slow? Is there a portion of the song that is instrumental? How am I going to find a picture that conveys a certain emotion?

Students realize that the project is dependent on them from an authoring point of view. The audience will be attentive if and only if the imagery complements the storyline. If they employ too many transitions or filters, they realize that applying too much technology will not attract the viewer. What makes our video project and practice innovative is that students become conscientious about the process as well as the destination. Most multimedia programs in other schools are satisfied with the process or the destination and usually the two are not merged. Our three dimensional approach fosters creativity and allows students to become independent problem solvers.

2. List the specific *Core Curriculum Content Standards, including the Cross-Content Workplace Readiness Standards,** addressed by the practice and describe how the practice addresses those standard(s). Provide an example to substantiate your response.

The activity: "Creating a Still Image Desktop Video", addresses many of the Core Curriculum Content Standards, and in particular, the Cross-Content Readiness Standards established by the NJ Department of Education. Students enrolled in the Hypermedia class meet the following standards with extreme competency:

- Standard 2: ALL STUDENTS WILL USE INFORMATION, TECHNOLOGY, AND OTHER TOOLS.

  As a result of this activity students develop skills in the acquisition and use of information, up to-date educational technology(Avid Cinema, Adobe Photoshop, SoundEdit16, QuickTime Pro 6.0), and other tools to improve learning, achieve goals, and produce products and presentations, the end product being a still image video. They learn to develop, locate, summarize, organize, synthesize, and evaluate information. They fine-tune their Internet searching skills including Boolean searches. Students use technological tools, such as telecommunications networking, for problem-solving, writing, and research. Students use our network in order to securely save their projects. The following indicators in Standard 2 have been identified:

  2.1 Understand how technological systems function. (Core multimedia elements explored)

  2.2 Select appropriate tools and technology for specific activities. (Various programs are used to manipulate and enhance each multimedia layer and component)

  2.3 Demonstrate skills needed to effectively access and use technology-based materials through keyboarding, troubleshooting, and retrieving and managing information. (students are taught how to search the Internet using Boolean Techniques)

  2.5 Access technology-based communication and information systems. (Students have dedicated contact to the Internet while in class)

  2.6 Access and assess information on specific topics using both technological (e.g., computer, telephone, satellite) and print resources available in libraries or media centers. (Students have to access individual files and documents on the Internet. For example Song Lyrics and images)

  2.7 Use technology and other tools to solve problems, collect data, and make decisions. (Students use filters and effects to enhance their videos)

  2.8 Use technology and other tools, including word-processing, spreadsheet and presentation programs, and print or graphic utilities, to produce products. (Students learn to multitask by transferring, sound, text, images from multiple programs)

  2.9 Use technology to present designs and results of investigations. (Students learn to use video filters while composing the video)

  2.10 Discuss problems related to the increasing use of technologies. (Students learn explore the overuse of filters and how it does not accentuate a project)

- Standard 3: ALL STUDENTS WILL USE CRITICAL THINKING, DECISIONMAKING AND PROBLEM-SOLVING SKILLS.

  This activity allows every student to develop original thoughts and ideas, think creatively, develop habits of inquiry, and take intellectual and performance risks. Since they are responsible for all aspects of the project, these skills are experienced. Since the students are taught using an open ended systems approach, they are taught to recognize problems, devise a variety of ways to solve these problems, analyze the potential advantages and disadvantages of each alternative, and evaluate the effectiveness of the method ultimately selected.
  The following indicators in Standard 3 have been identified:

  3.1 Recognize and define a problem, or clarify decisions to be made. (Students are directed to make decisions and select a song with parameters)

  3.2 Use models, relationships, and observations to clarify problems and potential solutions. (Students view previous solutions to the same video problem and identify some poor and some good solutions)

  3.5 Use the library media center as a critical resource for inquiry and assessment of print and nonprint materials. (Media Center is available to all students)

  3.7 Conduct systematic observations. (Students are shown how to preview filters and transitions)

  3.8 Organize, synthesize, and evaluate information for appropriateness and completeness. (Students are taught what is acceptable usage and our network computing policy)

  3.9 Identify patterns and investigate relationships. (Students are shown how synchronize their imagery with their music)

  3.11 Identify and evaluate the validity of alternative solutions. (Students learn to explore a variety of techniques to accomplish a given goal)

  3.13 Select and apply appropriate solutions to problem-solving and decision-making situations. (Students find individual solutions to individual problems)

  3.14 Evaluate the effectiveness of various solutions. (Students can preview certain video effects and determine if the viewer will be receptive to the effect)

  3.15 Apply problem-solving skills to original and creative/design projects.(Students will create an independent solution to the given problem with their own sense of interpretation and style)

- Standard 4: ALL STUDENTS WILL DEMONSTRATE SELF-MANAGEMENT SKILLS.

  This experience is a perfect way of allowing a student to become responsible for the project from the inception stage. Students address issues relating to personal development by being asked to identify their own problem as well the solution. Accepting responsibility for their own learning and understanding is a byproduct of this video assignment. They demonstrate positive work behaviors and ethics because their projects will be shared. They increase their ability to work individually and independently. The following indicators in Standard 4 have been identified:

  4.1 Set short and long term goals.(Students break their project into smaller parts)

  4.3 Evaluate their own actions and accomplishments.(Students decide on what Filters to apply)

  4.5 Provide constructive criticism to others. (Students learn to critique their work as well as others)

  4.9 Use time efficiently and effectively. (Students learn that time is a constraint and the project has a due date)

3. Describe the educational needs of students that the practice addresses. Document the assessment ... determine the extent to which the objectives of the practice have been met. Provide assessments and data to show how the practice met these needs.

When students sign up for Hypermedia, they have an interest in multimedia. They also possess a background in multimedia that, for the most part, is limited in creativity. In the past, they have been asked to create a variety of multimedia projects for many disciplines. Many of these assignments were assigned with the assumption that the student "knew how to do it". We take this into account and explore multimedia from the ground up. We introduce common mistakes that the "average" student makes and how to prevent them. Students realize that some common errors were due to not being shown how to "design" the project. The teachers were only concerned with the final product. This still image video assignment allows students, for the first time, to really understand what multitasking is all about. They view applications as part of a system and a process and eventually see multimedia as a tool that can be used for a variety of disciplines. Multimedia projects are no longer one dimensional with only one program but instead multidimensional that utilizes the strengths of various programs. For this experience, the students are evaluated in various stages of development. Students are evaluated on the Sound track after it has been modified. The images are also evaluated. The project is evaluated to see if it has a standard video heading and if the credits are at cited the end. The Video is further evaluated on form and function. Are the video images synchronized to the sound track? Do the images make sense? Is a story presented? Do the images fit a certain size format? Is the resolution poor? Did the student learn to use a filter? Was there an "over abundance of transitions"?
The final video is also evaluated on size versus time. They will learn to compress the audio track as well as the video track using a specified code (Compression-**dec**rompression).

4. Describe how you would replicate the practice in another school and/or district.

This practice is one of the easiest and rewarding that can be instituted with minimum expenditure in hardware and software. Most schools who have an Apple Imac computer or newer G3 or G4, will find the software Imovie as part of the preloaded software. This Software can be used instead of Avid Cinema. All of the techniques can be replicated using Imovie. As far as manipulating sound, QuickTime Pro can also be used to control the frequency and bit rate of the track. Any word processing program can be used to transfer text into Imovie. To accomplish this experience on a PC, a video-capturing program must be available. There are many shareware programs as well as dedicated video programs available (IE Waverunner, Ivideo, Adaptec) The goals and objectives will work on either platform since the task is not dependent on the computer or software.

This experience is a perfect example of how multimedia can be used to prepare students for the workforce. They will learn decision making, problem solving, as well as a variety of other life long skills that are essential to succeed in the world of work. If an open ended systems approach is used to teach this experience, students will benefit from participating in a true Technology Learning Activity. They will see for themselves that learning does not have to be teacher dominant and it can be a bi-directional experience and they are equally responsible for their education.